

EXHIBIT A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
W. von Deyn et al.)	
)	
Serial No. 10/574,153)	
)	Group Art Unit: 1626
Filed: March 29, 2006)	
)	Examiner: Sun Jae Y. Loewe

For : 2-Cyanobenzenesulfonamides for combating animal pests

DECLARATION UNDER 37 C.F.R. §1.132

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

Dear Sir:

1. I, Wolfgang von Deyn, Dr. rer. nat., a citizen of Germany and residing at An der Bleiche 24, 67435 Neustadt, Germany, hereby declare as follows:

I am a fully trained Chemist having studied Chemistry at the University of Hamburg, Germany, from 1976 to 1983. I received both a Diploma Degree in 1982 and doctorate degree (Ph.D.) in 1986 from the University of Hamburg. From 1986 to 1988 I conducted post-doctoral studies in carbohydrate chemistry at the University of Georgia.

I joined BASF SE, 67056 Ludwigshafen, Germany, in 1988. Since then, I have been working in the field of crop protection, and from 1988 to 1991 and from 2001 up to now in the field of pesticides. Therefore, I am fully conversant with the technical field to which the invention disclosed and claimed in application Ser. No. 10/574,153 belongs;

2. I have read and fully understood U.S. application, Ser. No. 10/574,153;

3. I have studied the record of application Ser. No. 10/574,153, in particular the Office Action of January 31, 2008, and the prior art applied by the Examiner, in particular the teaching of van Hes et al. (US 4,379,157);

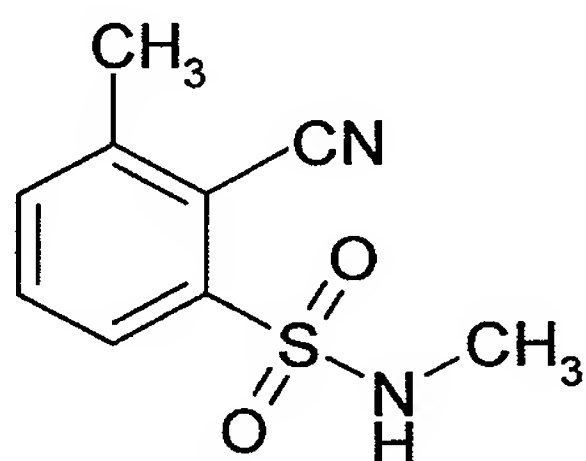
4. The following observations are made by me.

5. The compounds described in US 4,379,157, particularly the compounds 21 and 22, differ from the compounds of the invention in that the sulfonamide moiety is di-substituted instead of mono-substituted. The pesticidal activity of these compounds is however unsatisfactory as already pointed out on page 1, lines 15 - 18 of the application as filed (EP 0033984 is the European counterpart of US 4,379,157).

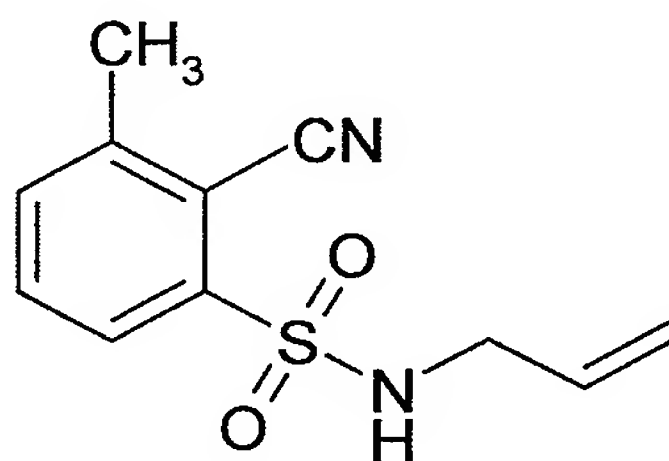
In contrast, the compounds of the present invention have insecticidal properties that are surprisingly clearly superior. This unexpected effect is evidenced by the comparative evaluation given below, in which the compounds of Examples 29 and 38 of the invention are compared with compounds 21 and 22 of US 4,379,157 (below: Comparative A and B) and also with further compounds that are not exemplified in but in the scope of US 4,379,157 (below: Comparative C and D).

The insecticidal activities of the following compounds were investigated:

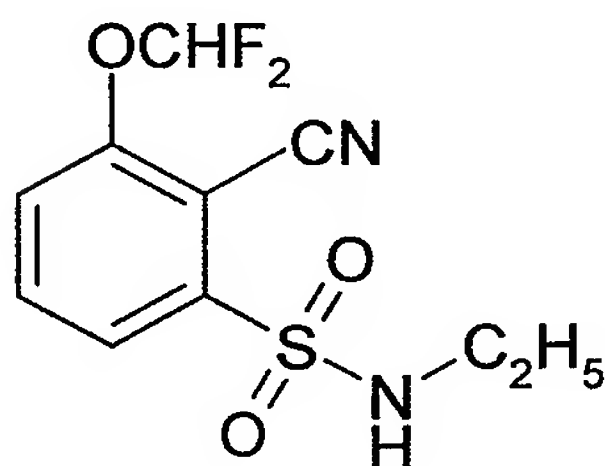
a) Compounds of the present invention



Example 29

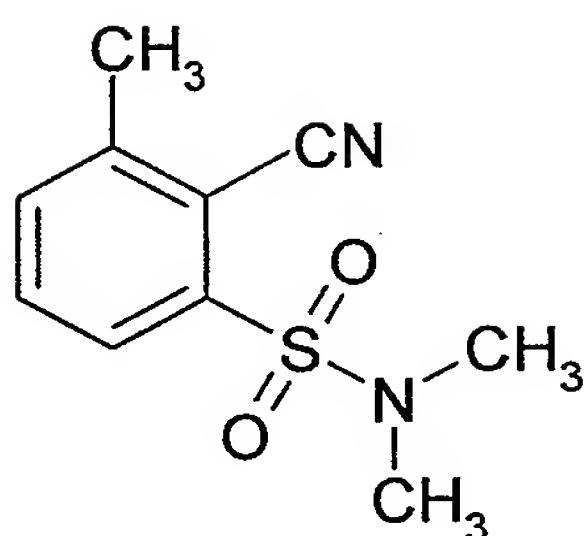


Example 38

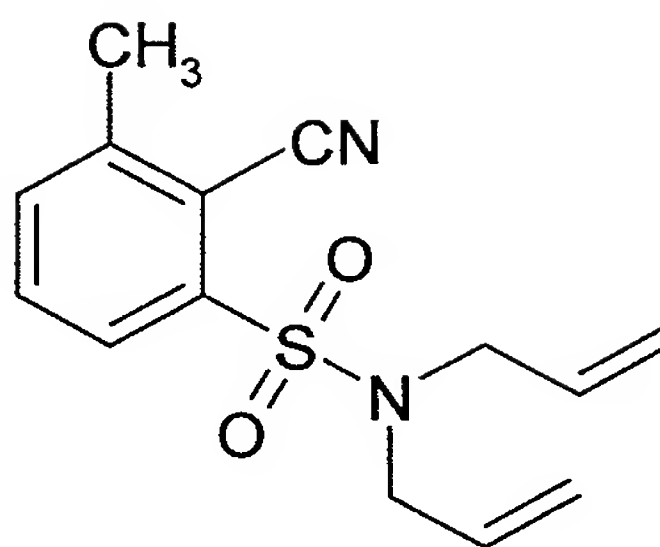


Example 66

b) Compounds 21 and 22 of US 4,379,157 (Comparatives A and B)

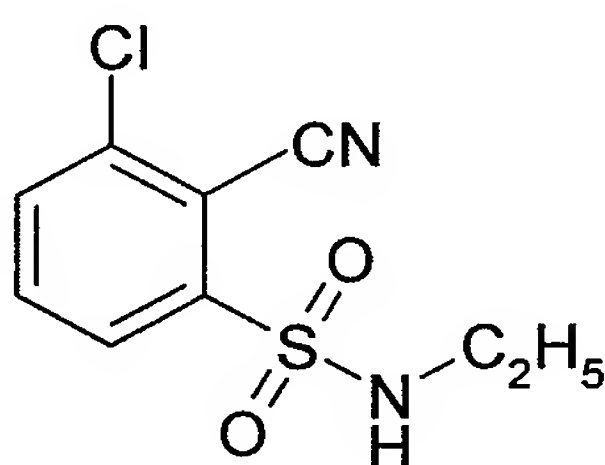


Comparative A

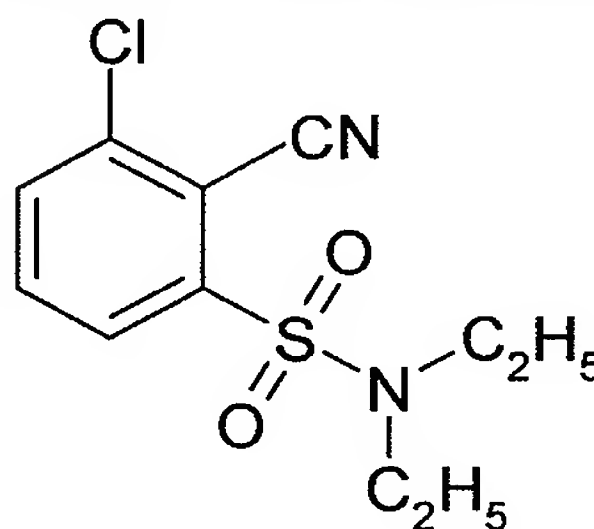


Comparative B

c) Compounds within the scope of US 4,379,157 (Comparatives C and D)



Comparative C



Comparative D

The insecticidal activities of these compounds against Green Peach Aphid, Cotton Aphid and Bean Aphid were evaluated by the test procedures disclosed on pages 58, line 35 to 59 last line of the application. The active ingredients were applied at a concentration of 10 ppm or 100 ppm. Results for insecticidal activity are expressed on a rating scale (0-9). The scale is based upon a reduction of live population vs. an untreated control.

Rating	% Reduction Compared to Check
9	100
8	86-99
7	76-85
6	66-75
5	56-65
4	46-55
3	36-45
2	26-35
1	10-25
0	no effect (< 10%)

The tests against Argentine Ants were conducted according to the procedure disclosed on page 61. The rating is given as relative mortality (mean cumulative % mortality) after 6 days.

The results of the experiments are summarized in Tables 1 to 4 below.

In Tables 1 to 3 the activities of Example 29 of the invention and Comparative A against different aphid species are compared. The only structural difference between these two compounds is that Example 29 carries one and Comparative A two methyl groups at the nitrogen. Likewise Tables 1 and 2 compare the activities measured for Example 38 and Comparative B, which are N-mono- and N-divinylated, respectively.

As can be seen from Tables 1 to 3, Examples 29 and 38 of the invention show distinctive higher insecticidal activities than their analogous counterparts described in US 4,379,157.

Table 1: Activity against Green Peach Aphid

	Activity Rating	
	10 ppm	100 ppm
Example 29	9	9
Comparative A	3	7
Example 38	3	9
Comparative B	0	3

Table 2: Activity against Cotton Aphid

	Activity Rating	
	10 ppm	100 ppm
Example 29	7	9
Comparative A	5	7
Example 38	5	8
Comparative B	0	7

Table 3: Activity against Bean Aphid

	Activity Rating	
	10 ppm	100 ppm
Example 29	5	7
Comparative A	0	0

Table 4 below lists the activity of Example 66 of the invention against Argentine Ants in comparison to the activities of Comparatives C and D that are within the scope of US 4,379,157. Comparative C differs from Example 66 only in the substituent in position 3 of the benzene ring, whereas Comparative D also carries an additional ethyl group at the nitrogen.

Example 66 was shown in Table 4 to be almost three times more effective than either Comparative C or D.

Table 4: Activity against Argentine ants

Treatment	% ai ¹⁾ (w/w)	Mean cumulative % mortality 6 days after treatment ²⁾
Example 66	1.0	100.0
Comparative C	1.0	35.6
Comparative D	1.0	35.6
Control	n/a	17.8

¹⁾ % active ingredient

²⁾ each mean is based on 45 ants (3 replications/treatment)

6. The undersigned petitioner declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

Neustadt, 18. 04. 2008

..... Wolfgang von Deyn
(Wolfgang von Deyn)